Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Magnetism and Magnetic Materials 289 (2005) 534–541
Journal of magnetism and magnetic materials
www.elsevier.com/locate/jmmm

Author index to volume 289

Ailiesei, O., see Dunca, S. 445
Albrecht, M., see Eberbeck, D. 70
Alexandrov, V., see Hennenberg, M. 268
Alves, C.R., see Sousa, E.C. 118
Alves, S.I., A. Bourdon and A.M. Figueiredo Neto, Investigation of the Soret coefficient in magnetic fluids using the Z-scan technique 285
Amaro, E., see Gamarra, L.F. 439
Andrade, S.S., D. Rabelo, V.K. Garg, A.C. Oliveira and P.C. Morais, Synthesis of magnetite nanoparticles in hydrophobic styrene–divinylbenzene copolymer templates 25
Aquino, R., see Sousa, E.C. 118
Aquino, R., J.A. Gomes, F.A. Tourinho, E. Dubois, R. Perzynski, G.J. da Silva and J. Depeyrot, Sm and Y radiolabeled magnetic fluids: magnetic and magneto-optical characterization 431
Aritomi, M., see Kikura, H. 342
Aritomi, M., see Kikura, H. 392
Aurich, K., see Glöckl, G. 480
Autenrieth, T., see Robert, A. 47
Autenrieth, T., see Wagner, J. 54
Ayrjan, E., see Kopčanský, P. 292
Azevedo, R.B., see Elói, M.T.A. 168
Azevedo, R.B., see Gravina, P.P. 448
Azevedo, R.B., see Santana, J.F.B. 452
Azevedo, R.B., see Silva, L.P. 463
Azevedo, R.B., see Sadeghiani, N. 466
Azevedo, R.B., see Oliveira, D.M. 476

Bacri, J.C., see Janiaud, E. 215
Bacri, J.C., see Raikher, Y.L. 222
Bakuzis, A.F., see Skeff Neto, K. 129
Bakuzis, A.F., see Gonçalves, G.R.R. 142
Bakuzis, A.F., see Castro, L.L. 230
Bakuzis, A.F., see Gravina, P.P. 448
Barbosa, L.S., see Sadeghiani, N. 466
Bashtovoi, V., O. Lavrova, T. Mitkova, V. Polevikov and L. Tobiska, Flow and energy dissipation in a magnetic fluid drop around a permanent magnet 207
Bashtovoi, V., M. Kovalev and A. Reks, Instabilities of bubbles and droplets flows in magnetic fluids 350
Bashtovoi, V., G. Bossis, P. Kuzhir and A. Reks, Magnetic field effect on capillary rise of magnetic fluids 376
Bashtovoi, V., M. Kovalev and A. Reks, Separation of bubbles from solid surfaces in magnetic fluids 382
Bee, A., see Saravia, D.C.A. 152
Bee, A., see Magalhães, M. 385
Bergemann, C., see Eberbeck, D. 435
Bica, D., see Vékás, L. 50
Bica, D., see Socoliuc, V. 177
Bica, D., see Kopčanský, P. 292
Bily, A., see Zaichenko, A. 17
Blums, E., New transport properties of ferrocolloids: magnetic Soret effect and thermomagnetoosmosis 246
Blums, E., G. Kronkalns, M.M. Maiorov and A. Mezulis, Thermoosmotic transfer of sterically stabilized ferrofluid particles in non-isothermal capillary porous layer 275
Bolshakov, M., see Bolshakova, I. 108
Bolshakova, I., see Zaichenko, A. 17
Bolshakova, I., M. Bolshakov, A. Zaichenko and A. Egorov, The investigation of the magnetic fluid stability using the devices with magnetic field microsensors 108
Bondarenko, E.A., see Chekanov, V.V. 155
Bönnemann, H., see Pop, L.M. 303
Bossis, G., see Bashtovoi, V. 376
Bourdon, A., see Mériguet, G. 39
Bourdon, A., see Alves, S.I. 285
Bourdon, A., see Magalhães, M. 385
Bozhko, A. and T. Tynjälä, Influence of gravitational sedimentation of magnetic particles on ferrofluid convection in experiments and numerical simulations 281
Bracinik, J., see Kopčanský, P. 97
Bracinik, J., see Kopčanský, P. 292
Brinkmeier, V., see Glöckl, G. 480
Brito, G.E.S., see Gamarra, L.F. 439
Brunke, O., S. Odenbach, C. Fritsche, I. Hilger and W.A. Kaiser, Determination of magnetic particle distribution in biomedical applications by X-ray microtomography 428
Bulte, J.W.M., Magnetic nanoparticles as markers for cellular MR imaging 423

Cabuil, V., see Ramaye, Y. 28
Calugaru, G., see Creanga, D. 81
Campos, A.F.C., F.A. Tourinho, G.J. da Silva and J. Depeyrot, Calculation of the pair potential interaction in electric double-layered magnetic fluids: a quantitative analysis of the pH-dependent phase diagram 171

doi: 10.1016/S0304-8853(05)00233-7

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Magnetism and Magnetic Materials 289 (2005) 534–541
Journal of magnetism and magnetic materials
www.elsevier.com/locate/jmmm

Author index to volume 289

Ailiesei, O., see Dunca, S. 445
Albrecht, M., see Eberbeck, D. 70
Alexandrov, V., see Hennenberg, M. 268
Alves, C.R., see Sousa, E.C. 118
Alves, S.I., A. Bourdon and A.M. Figueiredo Neto, Investigation of the Soret coefficient in magnetic fluids using the Z-scan technique 285
Amaro, E., see Gamarra, L.F. 439
Andrade, S.S., D. Rabelo, V.K. Garg, A.C. Oliveira and P.C. Morais, Synthesis of magnetite nanoparticles in hydrophobic styrene–divinylbenzene copolymer templates 25
Aquino, R., see Sousa, E.C. 118
Aquino, R., J.A. Gomes, F.A. Tourinho, E. Dubois, R. Perzynski, G.J. da Silva and J. Depeyrot, Sm and Y radiolabeled magnetic fluids: magnetic and magneto-optical characterization 431
Aritomi, M., see Kikura, H. 342
Aritomi, M., see Kikura, H. 392
Aurich, K., see Glöckl, G. 480
Autenrieth, T., see Robert, A. 47
Autenrieth, T., see Wagner, J. 54
Ayrjan, E., see Kopčanský, P. 292
Azevedo, R.B., see Elói, M.T.A. 168
Azevedo, R.B., see Gravina, P.P. 448
Azevedo, R.B., see Santana, J.F.B. 452
Azevedo, R.B., see Silva, L.P. 463
Azevedo, R.B., see Sadeghiani, N. 466
Azevedo, R.B., see Oliveira, D.M. 476

Bacri, J.C., see Janiaud, E. 215
Bacri, J.C., see Raikher, Y.L. 222
Bakuzis, A.F., see Skeff Neto, K. 129
Bakuzis, A.F., see Gonçalves, G.R.R. 142
Bakuzis, A.F., see Castro, L.L. 230
Bakuzis, A.F., see Gravina, P.P. 448
Barbosa, L.S., see Sadeghiani, N. 466
Bashtovoi, V., O. Lavrova, T. Mitkova, V. Polevikov and L. Tobiska, Flow and energy dissipation in a magnetic fluid drop around a permanent magnet 207
Bashtovoi, V., M. Kovalev and A. Reks, Instabilities of bubbles and droplets flows in magnetic fluids 350
Bashtovoi, V., G. Bossis, P. Kuzhir and A. Reks, Magnetic field effect on capillary rise of magnetic fluids 376
Bashtovoi, V., M. Kovalev and A. Reks, Separation of bubbles from solid surfaces in magnetic fluids 382
Bee, A., see Saravia, D.C.A. 152
Bee, A., see Magalhães, M. 385
Bergemann, C., see Eberbeck, D. 435
Bica, D., see Vékás, L. 50
Bica, D., see Socoliuc, V. 177
Bica, D., see Kopčanský, P. 292
Bily, A., see Zaichenko, A. 17
Blums, E., New transport properties of ferrocolloids: magnetic Soret effect and thermomagnetoosmosis 246
Blums, E., G. Kronkalns, M.M. Maiorov and A. Mezulis, Thermoosmotic transfer of sterically stabilized ferrofluid particles in non-isothermal capillary porous layer 275
Bolshakov, M., see Bolshakova, I. 108
Bolshakova, I., see Zaichenko, A. 17
Bolshakova, I., M. Bolshakov, A. Zaichenko and A. Egorov, The investigation of the magnetic fluid stability using the devices with magnetic field microsensors 108
Bondarenko, E.A., see Chekanov, V.V. 155
Bönnemann, H., see Pop, L.M. 303
Bossis, G., see Bashtovoi, V. 376
Bourdon, A., see Mériguet, G. 39
Bourdon, A., see Alves, S.I. 285
Bourdon, A., see Magalhães, M. 385
Bozhko, A. and T. Tynjälä, Influence of gravitational sedimentation of magnetic particles on ferrofluid convection in experiments and numerical simulations 281
Bracinik, J., see Kopčanský, P. 97
Bracinik, J., see Kopčanský, P. 292
Brinkmeier, V., see Glöckl, G. 480
Brito, G.E.S., see Gamarra, L.F. 439
Brunke, O., S. Odenbach, C. Fritsche, I. Hilger and W.A. Kaiser, Determination of magnetic particle distribution in biomedical applications by X-ray microtomography 428
Bulte, J.W.M., Magnetic nanoparticles as markers for cellular MR imaging 423

Cabuil, V., see Ramaye, Y. 28
Calugaru, G., see Creanga, D. 81
Campos, A.F.C., F.A. Tourinho, G.J. da Silva and J. Depeyrot, Calculation of the pair potential interaction in electric double-layered magnetic fluids: a quantitative analysis of the pH-dependent phase diagram 171

doi: 10.1016/S0304-8853(05)00233-7

Castro, L.L., M.F. da Silva, A.F. Bakuzis and R. Miotto, Mono-disperse ferrofluids clusterization: a Monte Carlo study 230
Cebers, A., Dynamics of elongated magnetic droplets and elastic rods in magnetic field 335
Cebers, A., see Janiaud, E. 215
Cebers, A., see Tatulchenkov, A. 373
Cernicchiaro, G., see Ferreira, J. 442
Charles, S.W., see Fannin, P.C. 133
Charles, S.W., see Giannitsis, A.T. 165
Chekanov, V.V., P.M. Iljuch, N.V. Kandaurova and E.A. Bondarenko, Autowaves in near-surface layer of magnetic fluid 155
Chen, C.-Y. and H.-J. Wu, Fingering instabilities of a miscible magnetic droplet on a rotating Hele–Shaw cell 339
Chen, C.-Y., H.-J. Wu and L. Hsu, Numerical simulations of labyrinthine instabilities on a miscible elliptical magnetic droplet 364
Cheng, Y., see Liu, T. 411
Cotae, V. and I. Creanga, LHC II system sensitivity to magnetic fluids 459
Creanga, D. and G. Calugaru, Physical investigations of a ferrofluid based on hydrocarbons 81
Creanga, D.-E., see Dunca, S. 445
Creanga, D.-E., see Poiata, A. 455
Creanga, D.-E., see Pavel, A. 469
Creanga, D.-E., see Manoliu, A. 473
Creanga, I., see Cotae, V. 459
Cunha, F.R. and Y.D. Sobral, Asymptotic solution for pressure-driven flows of magnetic fluids in pipes 314
Cunha, F.R., see Sobral, Y.D. 111
Cunha, F.R., see Ramos, D.M. 238
Cunha, F.R., see Sobral, Y.D. 318
Czechowski, G., see Kopčanský, P. 101

da Silva, G.J., see Campos, A.F.C. 171
da Silva, G.J., see Aquino, R. 431
da Silva, M.F., see Castro, L.L. 230
da Silva, S.W., see Pedroza, R.C. 139
da Silva, S.W., see Santana, J.F.B. 452
de Oliveira, P.S., see Ferreira, J. 442
Demouchy, G., see Mériguet, G. 39
Depeyrot, J., see Sousa, E.C. 118
Depeyrot, J., see Campos, A.F.C. 171
Depeyrot, J., see Gomes, J.A. 184
Depeyrot, J., see Aquino, R. 431
Desaive, T., see Hennenberg, M. 268
Dikansky, Y.I. and O.A. Nechaeva, Electrohydrodynamical instability of microdrops shapes in a magnetic fluid 90
Dikansky, Y.I., see Veguera, J.G. 87
Drofenik, M., see Makovec, D. 32
Dubois, E., see Mériguet, G. 39
Dubois, E., see Aquino, R. 431
Dunca, S., D.-E. Creanga, O. Ailiesei and E. Nimitan, Microorganisms growth with magnetic fluids 445
Dupuis, V., see Mériguet, G. 39
Dutra, H., see Ferreira, J. 442

Eberbeck, D., V. Janke, S. Hartwig, U. Heyen, D. Schüler, M. Albrecht and L. Trahms, Blocking of magnetic moments of magnetosomes measured by magnetorelaxometry and direct observation by magnetic force microscopy 70
Eberbeck, D., C. Bergemann, S. Hartwig, U. Steinhoff and L. Trahms, Binding kinetics of magnetic nanoparticles on latex beads and yeast cells studied by magnetorelaxometry 435
Egorov, A., see Bolshakova, I. 108
Elborai, S., see Rosensweig, R.E. 192
Elborai, S., see Rhodes, S. 353
Elfimova, E.A., Fractal aggregates in magnetic fluids 219
Elói, M.T.A., R.B. Azevedo, E.C.D. Lima, A.C.M. Pimenta and P.C. Morais, Birefringence and transmission electron microscopy of maghemite-based biocompatible magnetic fluids 168
Elias, F., see Janiaud, E. 215
Esquivel, D.M.S., see Ferreira, J. 442

Fannin, P.C., C.N. Marin, I. Malaescu and A.T. Giannitsis, Microwave absorption of composite magnetic fluids 78
Fannin, P.C., Y.P. Kalmykov and S.W. Charles, Investigation of subsidiary loss-peaks in the frequency dependent susceptibility profiles of magnetic fluids 133
Fannin, P.C., B.K.P. Scaife, A.T. Giannitsis and C. Mac Oireachtaigh, High frequency ferromagnetic resonance measurements in magnetic fluids 159
Fannin, P.C., I. Malaescu and C.N. Marin, The effective anisotropy constant of particles within magnetic fluids as measured by magnetic resonance 162
Fannin, P.C., see Giannitsis, A.T. 165
Fernandes, P.R.G., H. Mukai and I.M. Laczkowski, Magneto-optical effect in lyotropic liquid crystal doped with ferrofluid 115
Ferreira, J., G. Cernicchiaro, M. Winklhofer, H. Dutra, P.S. de Oliveira, D.M. S. Esquivel and E. Wajnberg, Comparative magnetic measurements on social insects 442
Figueiredo Neto, A.M., see Alves, S.I. 285
Figueiredo Neto, A.M., see Magalhães, M. 385
Figueiredo, J.M.A., see Licinio, P. 181
Fischer, B., B. Huke, M. Lücke and R. Hempelmann, Brownian relaxation of magnetic colloids 74
Fontoura Rodrigues, J.L.A., see Ramos, D.M. 238
Fritsche, C., see Brunke, O. 428

Gaind, A.P., see Ganguly, R. 331
Gamarra, L.F., G.E.S. Brito, W.M. Pontuschka, E. Amaro, A.H.C. Parma and G.F. Goya, Biocompatible superparamagnetic iron oxide nanoparticles used for contrast agents: a structural and magnetic study 439

Ganguly, R., A.P. Gaind, S. Sen and I.K. Puri, Analyzing ferrofluid transport for magnetic drug targeting 331
Garg, V.K., see Andrade, S.S. 25
Gawalek, W., see Müller, R. 13
Giannitsis, A.T., see Fannin, P.C. 78
Giannitsis, A.T., see Fannin, P.C. 159
Giannitsis, A.T., P.C. Fannin and S.W. Charles, Non-linear effects in magnetic fluids 165
Glöckl, G., V. Brinkmeier, K. Aurich, E. Romanus, P. Weber and W. Weitschies, Development of a liquid phase immunoassay by time-dependent measurements of the transient magneto-optical birefringence using functionalized magnetic nanoparticles 480
Gomes, J.A., M.H. Sousa, F.A. Tourinho, J. Mestnik-Filho, R. Itri and J. Depeyrot, Rietveld structure refinement of the cation distribution in ferrite fine particles studied by X-ray powder diffraction 184
Gomes, J.A., see Aquino, R. 431
Gonçalves, G.R.R., A.F. Bakuzis, K. Skeff Neto, F. Pelegrini and P.C. Morais, Magnetic resonance investigation of the particle–particle equilibrium distance within small agglomerates in magnetic fluids 142
Gonçalves, G.R.R., see Skeff Neto, K. 129
Gonçalves, M., see Silva, A.J. 295
Goya, G.F., see Sousa, E.C. 118
Goya, G.F., see Gamarra, L.F. 439
Gravina, P.P., A.F. Bakuzis, K. Skeff Neto, R.B. Azevedo and P.C. Morais, Investigation of the pH effect on the stability of biocompatible magnetic fluids using time-dependent birefringence measurements 448
Grübel, G., see Robert, A. 47
Grübel, G., see Wagner, J. 54
Guedes, M.H., see Santana, J.F.B. 452
Guedes, M.H.A., see Silva, L.P. 463
Gutman, F., see Rinaldi, C. 307

Härtl, W., see Robert, A. 47
Härtl, W., see Wagner, J. 54
Hartwig, A., see Kroell, M. 21
Hartwig, S., see Eberbeck, D. 70
Hartwig, S., see Eberbeck, D. 435
He, X., see Rinaldi, C. 307
He, X., see Li, D. 399
He, X., see Li, D. 407
He, X., see Li, D. 419
Hee Kim, E., H. Sook Lee, B. Kook Kwak and B.-K. Kim, Synthesis of ferrofluid with magnetic nanoparticles by sonochemical method for MRI contrast agent 328
Heinemann, A. and A. Wiedenmann, Insight into the formation of partially ordered structures in Co-based ferrofluids 149
Heinemann, A., see Wiedenmann, A. 58
Hempelmann, R., see Fischer, B. 74
Hennenberg, M., B. Weyssow, S. Slavtchev, V. Alexandrov and T. Desaive, Rayleigh–Marangoni–Bénard instability of a ferrofluid layer in a vertical magnetic field 268
Hergt, R., see Müller, R. 13
Herreman, W., P. Molho and S. Neveu, Magnetic field effects on viscous fingering of a ferrofluid in a radial Hele–Shaw cell 356
Hess, S., see Ilg, P. 325
Heyen, U., see Eberbeck, D. 70
Hilger, I., see Brunke, O. 428
Hirashima, O., see Kikura, H. 392
Hnatič, M., see Kopčanský, P. 292
Holm, C., see Huang, J.P. 234
Hong, C.-Y., Y.H. Ke, H.E. Horng, S.Y. Yang and H.C. Yang, Thermal activated variation in the ordered structures in magnetic fluids films 93
Horng, H.E., see Hong, C.-Y. 93
Hsu, L., see Chen, C.-Y. 364
Huang, J.P., Z.W. Wang and C. Holm, Structure and magnetic properties of mono- and bi-dispersed ferrofluids as revealed by simulations 234
Huang, X.Y., see Nguyen, N.T. 396
Huke, B. and M. Lücke, Roll, square, and cross-roll convection in ferrofluids 264
Huke, B., see Fischer, B. 74

Ilg, P., M. Kröger and S. Hess, Structure and rheology of model-ferrofluids under shear flow 325
Iljuch, P.M., see Chekanov, V.V. 155
Ishimoto, J. and S. Kamiyama, Numerical study of cavitating flow of magnetic fluid in a vertical converging–diverging nozzle 260
Itri, R., see Gomes, J.A. 184
Ivanov, A., see Mendelev, V. 211
Ivanov, A., see Kuznetsova, O. 226

Jackson, D.P., Theory, experiment, and simulations of a symmetric arrangement of quasi-two-dimensional magnetic fluid drops 188
Jadzyn, J., see Kopčanský, P. 101
Janiaud, E., J.C. Bacri, A. Cebers and F. Elias, Magnetic forces in 2D foams 215
Janke, V., see Eberbeck, D. 70
Jansen, A.G.M., see Kopčanský, P. 101
Jeyadevan, B., see Sato, K. 1
Jeyadevan, B., H. Koganezawa and K. Nakatsuka, Performance evaluation of citric ion-stabilized magnetic fluid heat pipe 253
Juríková, A., see Kopčanský, P. 97

Kaiser, W.A., see Brunke, O. 428
Kalmykov, Y.P., see Fannin, P.C. 133
Kamiyama, S., see Shimada, K. 9
Kamiyama, S., see Ishimoto, J. 260
Kandaurova, N.V., see Chekanov, V.V. 155
Kanno, H., see Shimada, K. 9
Kantorovich, S.S., Chain aggregate structure in polydisperse ferrofluids: different applications 203
Ke, Y.H., see Hong, C.-Y. 93

Kikura, H., M. Aritomi and Y. Takeda, Velocity measurement on Taylor–Couette flow of a magnetic fluid with small aspect ratio 342
Kikura, H., J. Matsushita, O. Hirashima, M. Aritomi and I. Nakatani, Flow visualization and particle size determination of primary clusters in a water-based magnetic fluid 392
Kim, B.-K., see Hee Kim, E. 328
Koganezawa, H., see Jeyadevan, B. 253
Koneracká, M., see Kopčanský, P. 97
Koneracká, M., see Kopčanský, P. 101
Koneracká, M., see Kopčanský, P. 415
Kook Kwak, B., see Hee Kim, E. 328
Kopčanský, P., M. Hnatič, M. Repašan, I. Potočová, M. Timko, I. Turek, J. Štelina, C. Musil, J. Bracinik, E. Ayrjan, L. Vekas and D. Bica, The light-induced structuralization in magnetic fluids with negative Soret constant 292
Kopčanský, P., I. Potočová, M. Koneracká, M. Timko, A.G.M. Jansen, J. Jadzyn and G. Czechowski, The anchoring of nematic molecules on magnetic particles in some types of ferronematics 101
Kopčanský, P., M. Timko, I. Potočová, M. Koneracká, A. Juríková, N. Tomašovičová, J. Štelina, C. Musil and J. Bracinik, The determination of the hydrodynamic diameter of magnetic particles using FRS experiment 97
Kopčanský, P., L. Tomčo, K. Marton, M. Koneracká, M. Timko and I. Potočová, The DC dielectric breakdown strength of magnetic fluids based on transformer oil 415
Košak, A., see Makovec, D. 32
Koser, H., see Mao, L. 199
Kovalev, M., see Bashtovoi, V. 350
Kovalev, M., see Bashtovoi, V. 382
Krakov, M.S. and I.V. Nikiforov, Thermomagnetic convection in a porous enclosure in the presence of outer uniform magnetic field 278
Krakov, M.S., I.V. Nikiforov and A.G. Reks, Influence of the uniform magnetic field on natural convection in cubic enclosure: experiment and numerical simulation 272
Kroell, M., M. Pridoehl, G. Zimmermann, L. Pop, S. Odenbach and A. Hartwig, Magnetic and rheological characterization of novel ferrofluids 21
Kröger, M., see Ilg, P. 325
Kronkalns, G., see Blums, E. 275
Kuckelhaus, S., see Silva, L.P. 463
Kuwahara, T. and H. Yamaguchi, Void fraction measurement in magnetic fluid 403
Kuzhir, P., see Bashtovoi, V. 376
Kuznetsova, O. and A. Ivanov, Spontaneous orientational ordering in magnetic fluids 226
Kvitantsev, A.S., see Naletova, V.A. 250

Lacava, Z.G.M., see Santana, J.F.B. 452
Lacava, Z.G.M., see Silva, L.P. 463
Lacava, Z.G.M., see Sadeghiani, N. 466
Lacava, Z.G.M., see Oliveira, D.M. 476
Laczkowski, I.M., see Fernandes, P.R.G. 115
Lan, H., see Li, D. 399
Lan, H., see Li, D. 407
Lan, H., see Li, D. 419
Lavrova, O., see Bashtovoi, V. 207
Lee, S.-H., see Rosensweig, R.E. 192
Lee, S.-H., see Rhodes, S. 353
Li, D., H. Xu, X. He and H. Lan, Theoretical and experimental study on the magnetic fluid seal of reciprocating shaft 399
Li, D., H. Xu, X. He and H. Lan, Mechanism of magnetic liquid flowing in the magnetic liquid seal gap of reciprocating shaft 407
Li, D., H. Xu, X. He and H. Lan, Study on the magnetic fluid sealing for dry Roots pump 419
Li, Z. and K. Raj, Effect of vacuum level on evaporation rate of magnetic fluids 43
Licinio, P., see Teixeira, A.V. 126
Licinio, P., A.V. Teixeira and J.M.A. Figueiredo, Nonlinear dielectric response of ferrofluids under magnetic field 181
Lima, E.C.D., see Elói, M.T.A. 168
Lima, E.C.D., see Oliveira, D.M. 476
Liu, T., Y. Cheng and Z. Yang, Design optimization of seal structure for sealing liquid by magnetic fluids 411
Lobaz, V., see Zaichenko, A. 17
Lücke, M., see Fischer, B. 74
Lücke, M., see Huke, B. 264

Mac Oireachtaigh, C., see Fannin, P.C. 159
Macaroff, P.P., see Oliveira, D.M. 476
Magalhães, M., A.M. Figueiredo Neto, A. Bee, D. Talbot and A. Bourdon, Wetting of glass surface covered with Teflon by ferrofluid as a function of concentration and size of grains, and pH of the solution 385
Maiorov, M.M., see Blums, E. 275
Makovec, D., A. Košak, A. Žnidaršič and M. Drofenik, The synthesis of spinel–ferrite nanoparticles using precipitation in microemulsions for ferrofluid applications 32
Malaescu, I., see Fannin, P.C. 78
Malaescu, I., see Fannin, P.C. 162
Manoliu, A., L. Oprica and D.-E. Creanga, Ferrofluid and cellulolytic fungi 473
Mao, L. and H. Koser, Ferrohydrodynamic pumping in spatially traveling sinusoidally time-varying magnetic fields 199
Marin, C.N., see Fannin, P.C. 78
Marin, C.N., see Fannin, P.C. 162
Marinica, O., see Vékás, L. 50
Marton, K., see Kopčanský, P. 415
Matoussevitch, N., see Pop, L.M. 303
Matsushita, J., see Kikura, H. 392
Matthies, G. and L. Tobiska, Numerical simulation of normal-field instability in the static and dynamic case 346
Mehta, R.V., R.V. Upadhyay, R. Patel and P. Trivedi, Magnetooptical effects in magnetic fluid containing large aggregates 36
Mehta, R.V., see Parekh, K. 311

Mendelev, V. and A. Ivanov, Magnetic properties of ferrofluids: an influence of chain aggregates 211
Mériguet, G., E. Dubois, A. Bourdon, G. Demouchy, V. Dupuis and R. Perzynski, Forced Rayleigh scattering experiments in concentrated magnetic fluids: effect of interparticle interactions on the diffusion coefficient 39
Mestnik-Filho, J., see Gomes, J.A. 184
Mezulis, A., see Blums, E. 275
Miotto, R., see Castro, L.L. 230
Miranda, J.A., see Oliveira, R.M. 360
Miranda, J.A., see Scherer, C. 484
Mitina, N., see Zaichenko, A. 17
Mitkova, T., see Bashtovoi, V. 207
Molho, P., see Herreman, W. 356
Morais, P.C., J.G. Santos, L.B. Silveira, W.C. Nunes, J.P. Sinnecker and M.A. Novak, Magnetic investigation of zero-field-cooled dextran-coated magnetite-based magnetic fluid 174
Morais, P.C., see Andrade, S.S. 25
Morais, P.C., see Pelegrini, F. 84
Morais, P.C., see Skeff Neto, K. 129
Morais, P.C., see Silva, O. 136
Morais, P.C., see Pedroza, R.C. 139
Morais, P.C., see Gonçalves, G.R.R. 142
Morais, P.C., see Pereira, A.R. 146
Morais, P.C., see Elói, M.T.A. 168
Morais, P.C., see Gravina, P.P. 448
Morais, P.C., see Santana, J.F.B. 452
Morais, P.C., see Silva, L.P. 463
Morais, P.C., see Sadeghiani, N. 466
Morais, P.C., see Oliveira, D.M. 476
Motozawa, M. and T. Sawada, Influence of magnetic field on ultrasonic propagation velocity in magnetic fluids 66
Mukai, H., see Fernandes, P.R.G. 115
Müller, R., R. Hergt, M. Zeisberger and W. Gawalek, Preparation of magnetic nanoparticles with large specific loss power for heating applications 13
Müller, H.W., see Odenbach, S. 242
Musil, C., see Kopčanský, P. 97
Musil, C., see Kopčanský, P. 292

Nakagawa, A., see Sudo, S. 321
Nakatani, I., see Kikura, H. 392
Nakatsuka, K., see Jeyadevan, B. 253
Naletova, V.A. and A.S. Kvitantsev, Thermomagnetic force acting on a spheroidal body in a magnetic fluid 250
Naletova, V.A., V.A. Turkov, V.V. Sokolov and A.N. Tyatyuskin, The interaction of the particles of magnetizable suspensions with a wall (wall-adjacent effect) in uniform electric and magnetic fields 367
Naletova, V.A., V.A. Turkov and A.N. Tyatyushkin, Spherical body in a magnetic fluid in uniform electric and magnetic fields 370
Nechaeva, O.A., see Dikansky, Y.I. 90
Neveu, S., see Ramaye, Y. 28
Neveu, S., see Herreman, W. 356
Nguyen, N.T., Z.G. Wu, X.Y. Huang and C.-Y. Wen, The application of μPIV technique in the study of magnetic flows in a micro-channel 396
Nikiforov, I.V., see Krakov, M.S. 272
Nikiforov, I.V., see Krakov, M.S. 278
Nimitan, E., see Dunca, S. 445
Nishiyama, H., see Sudo, S. 321
Novak, M.A., see Morais, P.C. 174
Nunes, W.C., see Morais, P.C. 174

Odenbach, S. and H.W. Müller, On the microscopic interpretation of the coupling of the symmetric velocity gradient to the magnetization relaxation 242
Odenbach, S. and T. Völker, Thermal convection in a ferrofluid supported by thermodiffusion 122
Odenbach, S., see Kroell, M. 21
Odenbach, S., see Völker, T. 289
Odenbach, S., see Pop, L.M. 303
Odenbach, S., see Brunke, O. 428
Oliveira, A.C., see Andrade, S.S. 25
Oliveira, D.M., P.P. Macaroff, K.F. Ribeiro, Z.G.M. Lacava, R.B. Azevedo, E.C.D. Lima, P.C. Morais and A.C. Tedesco, Studies of zinc phthalocyanine/magnetic fluid complex as a bifunctional agent for cancer treatment 476
Oliveira, R.M. and J.A. Miranda, Magnetic fluid in a time-dependent gap Hele–Shaw cell 360
Oprica, L., see Manoliu, A. 473
Oshiama, S., see Yamane, R. 389

Padalka, V.V., see Yerin, C.V. 105
Parekh, K., R. Patel, R.V. Upadhyay and R.V. Mehta, Field-induced diffraction patterns in a magneto-rheological suspension 311
Park, M.-K., see Yamane, R. 389
Parma, A.H.C., see Gamarra, L.F. 439
Patel, R., see Mehta, R.V. 36
Patel, R., see Parekh, K. 311
Pavel, A. and D.-E. Creanga, Chromosomal aberrations in plants under magnetic fluid influence 469
Pedroza, R.C., S.W. da Silva, M.A.G. Soler, P.P.C. Sartoratto, D.R. Rezende and P.C. Morais, Raman study of nanoparticle-template interaction in a $CoFe_2O_4/SiO_2$-based nanocomposite prepared by sol–gel method 139
Pelegrini, F., A.R. Pereira and P.C. Morais, Ferromagnetic resonance line of ferrite ferrofluids at high microwave power 84
Pelegrini, F., see Skeff Neto, K. 129
Pelegrini, F., see Gonçalves, G.R.R. 142
Pelegrini, F., see Pereira, A.R. 146
Pereira, A.R., F. Pelegrini and P.C. Morais, Magnetic resonance investigation of monodisperse oleoylsarcosine-coated magnetic fluid 146
Pereira, A.R., see Pelegrini, F. 84
Perez, J., see Rhodes, S. 353
Perzynski, R., see Mériguet, G. 39
Perzynski, R., see Raikher, Y.L. 222

Perzynski, R., see Aquino, R. 431
Pimenta, A.C.M., see Elói, M.T.A. 168
Poiata, A., A. Vlahovici and D.-E. Creanga, Ferrofluid effect on *Pseudomonas pyoverdine* 455
Polevikov, V. and L. Tobiska, Instability of magnetic fluid in a narrow gap between plates 379
Polevikov, V., see Bashtovoi, V. 207
Pontuschka, W.M., see Gamarra, L.F. 439
Pop, L., see Kroell, M. 21
Pop, L.M., S. Odenbach, A. Wiedenmann, N. Matoussevitch and H. Bönnemann, Microstructure and rheology of ferrofluids 303
Potočová, I., see Kopčanský, P. 97
Potočová, I., see Kopčanský, P. 101
Potočová, I., see Kopčanský, P. 292
Potočová, I., see Kopčanský, P. 415
Pridoehl, M., see Kroell, M. 21
Puri, I.K., see Ganguly, R. 331

Rabelo, D., see Andrade, S.S. 25
Raikher, Y.L. and O.V. Stolbov, Magnetodeformational effect in ferrogel objects 62
Raikher, Y.L., V.I. Stepanov, J.C. Bacri and R. Perzynski, Orientational dynamics in magnetic fluids under strong coupling of external and internal relaxations 222
Raj, K., see Li, Z. 43
Ramaye, Y., S. Neveu and V. Cabuil, Ferrofluids from prism-like nanoparticles 28
Ramos, D.M., F.R. Cunha, Y.D. Sobral and J.L.A. Fontoura Rodrigues, Computer simulations of magnetic fluids in laminar pipe flows 238
Raşa, M., see Vékás, L. 50
Rechenberg, H.R., see Sousa, E.C. 118
Reks, A., see Bashtovoi, V. 350
Reks, A., see Bashtovoi, V. 376
Reks, A., see Bashtovoi, V. 382
Reks, A.G., see Krakov, M.S. 272
Repašan, M., see Kopčanský, P. 292
Rezende, D.R., see Pedroza, R.C. 139
Rhodes, S., J. Perez, S. Elborai, S.-H. Lee and M. Zahn, Ferrofluid spiral formations and continuous-to-discrete phase transitions under simultaneously applied DC axial and AC in-plane rotating magnetic fields 353
Ribeiro, K.F., see Oliveira, D.M. 476
Rinaldi, C., F. Gutman, X. He, A.D. Rosenthal and M. Zahn, Torque measurements on ferrofluid cylinders in rotating magnetic fields 307
Robert, A., J. Wagner, T. Autenrieth, W. Härtl and G. Grübel, Coherent X-rays as a new probe for the investigation of the dynamics of opaque colloidal suspensions 47
Robert, A., see Wagner, J. 54
Romanus, E., see Glöckl, G. 480
Rosensweig, R.E., S. Elborai, S.-H. Lee and M. Zahn, Ferrofluid meniscus in a horizontal or vertical magnetic field 192
Rosenthal, A.D., see Rinaldi, C. 307

Sadeghiani, N., L.S. Barbosa, L.P. Silva, R.B. Azevedo, P.C. Morais and Z.G.M. Lacava, Genotoxicity and inflammatory investigation in mice treated with magnetite nanoparticles surface coated with polyaspartic acid 466
Sakatani, K., see Shuchi, S. 257
Santana, J.F.B., M.A.G. Soler, S.W. da Silva, M.H. Guedes, Z.G.M. Lacava, R.B. Azevedo and P.C. Morais, Investigation of the interaction between magnetic nanoparticles surface-coated with carboxymethyldextran and blood cells using Raman spectroscopy 452
Santos, J.G., see Morais, P.C. 174
Saravia, D.C.A., A. Bee and S.M. Shibli, Blocking phenomena studies on ferronematics 152
Sartoratto, P.P.C., see Pedroza, R.C. 139
Sato, K., B. Jeyadevan and K. Tohji, Preparation and properties of ferromagnetic FePt dispersion 1
Sawada, T., see Motozawa, M. 66
Scaife, B.K.P., see Fannin, P.C. 159
Scherer, C. and J.A. Miranda, Introduction to the magnetic fluids bibliography 484
Scherer, C., Computer simulation of magnetorheological transition on a ferrofluid emulsion 196
Scherer, C., Magnetic Fluids Bibliography (2001–2004) 486
Schmidt, A.M., Induction heating of novel thermoresponsive ferrofluids 5
Schüler, D., see Eberbeck, D. 70
Sen, S., see Ganguly, R. 331
Shevchuk, O., see Zaichenko, A. 17
Shibli, S.M., see Saravia, D.C.A. 152
Shibli, S.M., see Silva, A.J. 295
Shimada, K., S. Shuchi, H. Kanno, Y. Wu and S. Kamiyama, Magnetic cluster and its applications 9
Shimada, K., see Sudo, S. 321
Shuchi, S., see Shimada, K. 9
Shuchi, S., K. Sakatani and H. Yamaguchi, An application of a binary mixture of magnetic fluid for heat transport devices 257
Silva, A.J., M. Gonçalves and S.M. Shibli, Thermodiffusion study in ferrofluids through collinear mirage effect 295
Silva, L.P., S. Kuckelhaus, M.H.A. Guedes, Z.G.M. Lacava, A.C. Tedesco, P.C. Morais and R.B. Azevedo, Kinetic of magnetic nanoparticles uptake evaluated by morphometry of mice peritoneal cells 463
Silva, L.P., see Sadeghiani, N. 466
Silva, O. and P.C. Morais, Investigation of anisotropy in cadmium ferrite-based ionic magnetic fluid using magnetic resonance 136
Silveira, L.B., see Morais, P.C. 174
Sinnecker, J.P., see Morais, P.C. 174
Skeff Neto, K., A.F. Bakuzis, G.R.R. Gonçalves, F. Pelegrini and P.C. Morais, Evidence of phase separation in magnetic colloids using magnetic resonance 129
Skeff Neto, K., see Gonçalves, G.R.R. 142
Skeff Neto, K., see Gravina, P.P. 448
Slavtchev, S., see Hennenberg, M. 268

Sobral, Y.D. and F.R. Cunha, Hierarchy of concentration waves in magnetic fluidized beds 111
Sobral, Y.D. and F.R. Cunha, Drift velocity and deformation of polarized drops in magnetic fields 318
Sobral, Y.D., see Ramos, D.M. 238
Sobral, Y.D., see Cunha, F.R. 314
Socoliuc, V. and D. Bica, The influence of the Néel rotation on the magnetic induced dichroism in magnetic fluids 177
Socoliuc, V., see Vékás, L. 50
Sokolov, V.V., see Naletova, V.A. 367
Soler, M.A.G., see Pedroza, R.C. 139
Soler, M.A.G., see Santana, J.F.B. 452
Sook Lee, H., see Hee Kim, E. 328
Sousa, E.C., C.R. Alves, R. Aquino, M.H. Sousa, G.F. Goya, H.R. Rechenberg, F.A. Tourinho and J. Depeyrot, Experimental evidence of surface effects in the magnetic dynamics behavior of ferrite nanoparticles 118
Sousa, M.H., see Sousa, E.C. 118
Sousa, M.H., see Gomes, J.A. 184
Steinhoff, U., see Eberbeck, D. 435
Štelina, J., see Kopčanský, P. 97
Štelina, J., see Kopčanský, P. 292
Stepanov, V.I., see Raikher, Y.L. 222
Stoian, F.D., see Vékás, L. 50
Stolbov, O.V., see Raikher, Y.L. 62
Su, W.-P., see Wen, C.-Y. 299
Sudo, S., A. Nakagawa, K. Shimada and H. Nishiyama, Shape response of functional fluid drops in alternating magnetic fields 321
Takeda, Y., see Kikura, H. 342
Talbot, D., see Magalhães, M. 385
Tatulchenkov, A. and A. Cebers, Shapes of a gas bubble rising in the vertical Hele–Shaw cell with magnetic liquid 373
Tedesco, A.C., see Silva, L.P. 463
Tedesco, A.C., see Oliveira, D.M. 476
Teixeira, A.V. and P. Licinio, Local deformations of ferrogels induced by uniform magnetic fields 126
Teixeira, A.V., see Licinio, P. 181
Timko, M., see Kopčanský, P. 97
Timko, M., see Kopčanský, P. 101
Timko, M., see Kopčanský, P. 292
Timko, M., see Kopčanský, P. 415
Tobiska, L., see Bashtovoi, V. 207
Tobiska, L., see Matthies, G. 346
Tobiska, L., see Polevikov, V. 379
Tohji, K., see Sato, K. 1
Tomašovičová, N., see Kopčanský, P. 97
Tomčo, L., see Kopčanský, P. 415
Tourinho, F.A., see Sousa, E.C. 118
Tourinho, F.A., see Campos, A.F.C. 171
Tourinho, F.A., see Gomes, J.A. 184
Tourinho, F.A., see Aquino, R. 431
Trahms, L., see Eberbeck, D. 70
Trahms, L., see Eberbeck, D. 435
Trivedi, P., see Mehta, R.V. 36
Turek, I., see Kopčanský, P. 292
Turkov, V.A., see Naletova, V.A. 367
Turkov, V.A., see Naletova, V.A. 370
Tyatyushkin, A.N., see Naletova, V.A. 370
Tyatyuskin, A.N., see Naletova, V.A. 367
Tynjälä, T., see Bozhko, A. 281

Upadhyay, R.V., see Mehta, R.V. 36
Upadhyay, R.V., see Parekh, K. 311

Veguera, J.G. and Y.I. Dikansky, Periodical structure in a magnetic fluid under the action of an electric field and with a shear flow 87
Vékás, L., D. Bica, O. Marinica, M. Rașa, V. Socoliuc and F.D. Stoian, Concentrated magnetic fluids on water and short chain length organic carriers 50
Vekas, L., see Kopčanský, P. 292
Vlahovici, A., see Poiata, A. 455
Völker, T. and S. Odenbach, Thermodiffusion in magnetic fluids 289
Völker, T., see Odenbach, S. 122

Wagner, J., T. Autenrieth, A. Robert, W. Härtl and G. Grübel, Structure and dynamics of complex liquids with magnetic dipole–dipole interactions by means of static and dynamic X-ray scattering 54
Wagner, J., see Robert, A. 47
Wajnberg, E., see Ferreira, J. 442
Wang, Z.W., see Huang, J.P. 234
Weber, P., see Glöckl, G. 480
Weitschies, W., see Glöckl, G. 480
Wen, C.-Y. and W.-P. Su, Natural convection of magnetic fluid in a rectangular Hele-Shaw cell 299
Wen, C.-Y., see Nguyen, N.T. 396
Weyssow, B., see Hennenberg, M. 268
Wiedenmann, A. and A. Heinemann, Field-induced ordering phenomena in ferrofluids observed by small-angle neutron scattering 58
Wiedenmann, A., see Heinemann, A. 149
Wiedenmann, A., see Pop, L.M. 303
Winklhofer, M., see Ferreira, J. 442
Wu, H.-J., see Chen, C.-Y. 339
Wu, H.-J., see Chen, C.-Y. 364
Wu, Y., see Shimada, K. 9
Wu, Z.G., see Nguyen, N.T. 396

Xu, H., see Li, D. 399
Xu, H., see Li, D. 407
Xu, H., see Li, D. 419

Yamaguchi, H., see Shuchi, S. 257
Yamaguchi, H., see Kuwahara, T. 403
Yamane, R., S. Oshiama and M.-K. Park, Magnetically suspended virtual divergent channel 389
Yang, H.C., see Hong, C.-Y. 93
Yang, S.Y., see Hong, C.-Y. 93
Yang, Z., see Liu, T. 411
Yerin, C.V. and V.V. Padalka, Influence of electric field upon the formation of particles cluster in magnetic fluid 105

Zahn, M., see Rosensweig, R.E. 192
Zahn, M., see Rinaldi, C. 307

Zahn, M., see Rhodes, S. 353
Zaichenko, A., I. Bolshakova, N. Mitina, O. Shevchuk, A. Bily and V. Lobaz, The synthesis and rheological characteristics of colloidal systems containing functional magnetic nanoparticles 17
Zaichenko, A., see Bolshakova, I. 108
Zeisberger, M., see Müller, R. 13
Zimmermann, G., see Kroell, M. 21
Žnidaršič, A., see Makovec, D. 32

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Magnetism and Magnetic Materials 289 (2005) 542–544
Journal of magnetism and magnetic materials
www.elsevier.com/locate/jmmm

Subject index to volume 289

Aggregation 9, 234
Aggregation in magnetic fluids 36
Aggregation processes 105
Anchoring 101
Anisotropy 66
Anti-pressure 399
Ants 442
Asymptotic solution 314
Autowave 155

Bacteria 455
Bacteria strains 445
Binding reaction kinetics 435
Biocompatibility 466
Biocompatible magnetic fluids 168, 431
Biodistribution of magnetic particles 428
Biomass 445
Biomaterial 463
Biomedical application 428
Biomineralization 442
Birefringence 177, 222
Blocking phenomena 152
Blood mice 452
Boiling heat transfer 257
Boundary integral equations 373
Box-plot distribution 81
Brown relaxation 480
Brown rotation 177
Brownian dynamics 325
Brownian motion 392
Bubble 382
Bubbles flows 350
Buckling 335

Capillary rise 376
Carboxymethyldextran 452
Catalase 473
Cation distribution 184
Cavitation 260
Cell density 445
Cell proliferation 469
Cellulolytic fungi 473
Chain aggregates 211
Chitosan 328
Chlorophyll ratio 459
Citric ion-stabilized magnetic fluid 253
Cluster 66
Cobalt-ferrite 139
Coherent X-rays 47
Colloïd 28
Colloidal suspensions 47
Colloids 39, 74, 230
Complex liquids 54
Complex magnetic susceptibility 78, 162
Complex susceptibility 133, 159, 165
Composite material 9
Concentration waves 111
Contrast media 439
Convection 264, 272, 278
Cross-rolls 264
Cubic enclosure 272

Damper 9
Damper system 207
Demagnetization 403
Demagnetization factor 192
Dendrimer 423
Dendrites 356
Design optimization 411
Diamagnetic liquid 389
Dichroism 177
Dielectric breakdown 415
Dielectric properties 415
Differential pressure 419
Disjoining pressure 215
Dispersed FePt 1
Dispersions 325
Double-layer stabilization 50
Drift velocity 318
Drop deformation 318
Droplet 321
Droplets flows 350
Dynamic light scattering 105

Effective anisotropy constant 162
Electric double layered magnetic fluids 171
Electric field 370
Electrohydrodynamical instability 90
Energy minimization 192
ESR 162
Evaporation rate 43

FePt 1
FePt magnetic fluids 1
FePt nanoparticles 1
Ferrite nanoparticles 328
Ferrites 184
Ferrofluid 149, 177, 188, 192, 264, 281, 289, 307, 328, 331, 346, 356, 473
Ferrofluid flows 353
Ferrofluid instabilites 353
Ferrofluid pattern 353
Ferrofluid spirals 353
Ferrofluids 13, 47, 54, 58, 84, 115, 152, 181, 199, 268, 295, 303
Ferrogels 62
Ferrohydrodynamics 360
Ferromagnetic particles 392
Ferromagnetic resonance 78, 133, 159
Ferronematic 101, 152
Field-induced magnetic birefringence 480
Field-induced ordering 58
Fine magnetic particle 101
Fine particle systems 129, 142, 448
Fine-particle system 174
Fine-particle systems 74
Fingering instabilities 339, 364
Finite element method 207
Finite element solution 346
Finite volume 238
Flow visualization 392
Fluorescence 455
FMR 84
FMR line 84
Forced Rayleigh scattering 39, 97
Fractal aggregate 219
Fractals 356
Fraunhoffer diffraction 311
Fredericksz transition 101
Free surface 376
Friction factor 314

Glass crystallisation 13
Growth inhibition 455

Heat pipe 253
Heat transfer 272, 278
Heat transport device 257
Hele-Shaw cell 299
Hele–shaw cell 215, 373
Hele–Shaw flows 364
High coercivity 1
High-power FMR 84
Homogeneous nucleation 17
Human IgG 480

doi:10.1016/S0304-8853(05)00234-9

Hyperthermia 476
Hysteresis 442

Impedance spectroscopy 181
Induced birefringence 385
Inductive heating 5
Initial susceptibility 211
Instabilities 350, 379
Interaction 188
Interfacial instability 360
Interfacial phenomena 192
Internal flow 260
IR stretching 81
Iron 28

Knudsen cell 43

Labyrinthine patterns 373
Laminar flow 314
Laminar pipe-flow 238
Langevin molecular dynamics simulation 234
Langmuir equation 43
Levitation 389
Light scattering 50, 126
Linear stability 268
Liquid crystal 101
Liquid crystal thermography 299
Liquid metal MHD 260
Lorentz force 370
Lyotropic liquid crystals 115

Macrophages 463
Maghemite 32, 168
Magneric fluid 403
Magnetic and dielectric fluids 367
Magnetic and electric forces 367
Magnetic and flow properties 50
Magnetic and magneto-optical properties 431
Magnetic anisotropy 136, 146, 222, 439
Magnetic birefringence 168, 203
Magnetic cluster 9
Magnetic colloids 17, 149, 177
Magnetic compound fluid 321
Magnetic compound fluid (MCF) 9
Magnetic convection 246
Magnetic driving force 257
Magnetic drug targeting 331
Magnetic dynamics 118
Magnetic field 9, 250, 356, 370, 376, 382
Magnetic filaments 335
Magnetic fluidized beds 111
Magnetic fluids 5, 9, 43, 66, 66, 87, 87, 90, 93, 97, 105, 108, 136, 136, 146, 155, 162, 162, 174, 174, 177, 192, 207, 207, 238, 238, 238, 238, 250, 250, 257, 272, 278, 278, 292, 299, 311, 321, 321, 321, 342, 342, 376, 376, 376, 376, 382, 382, 389, 399, 399, 411, 415, 419, 445, 445, 452, 455, 463, 466, 469, 476
Magnetic foam 215
Magnetic force microscopy 70
Magnetic gels 126
Magnetic hyperthermia 13
Magnetic liquids 28, 39, 74, 118, 129, 142, 325, 373, 407, 448, 459
Magnetic losses 13
Magnetic nanoparticles 13, 62, 118, 184, 307, 435, 439
Magnetic permeability 219
Magnetic pressure coefficient 111
Magnetic pumping 199
Magnetic recovery 318
Magnetic resonance 129, 136, 142, 146
Magnetic stress 192
Magnetite 5, 25, 253, 442
Magnetization 174, 211
Magnetization measurement 21
Magneto-optical effect 115
Magneto-rheological fluid 321
Magnetodeformational effect 62
Magnetodielectric anisotropy 181
Magnetohydrodynamics and electrohydrodynamics 325
Magnetooptical effects 36, 448
Magnetorelaxometry 70, 435
Magnetorheological suspension 311
Magnetorheology 307
Magnetosomes 70
Magnetotactic bacteria 335
Magnetoviscosity 307
Magnetoviscous effect 203, 242, 303
Mass transport 331
Maxwell equations 379
Meniscus 192
Micro-channel 396
Micro-PIV 396
Microdrop aggregate 90
Micronucleus test 466
Microsensors 108
Microstructure 303
Minimum energy 188
Mirage effect 295
Miscible magnetic Bond number 364
Mitotic index 469
Molecular dynamics 325
Monte Carlo simulations 230
Morphometry 463
MR contrast agent 423
MR imaging 423
MRI contrast agent 328
Multiphase flow 260
Multiple scattering 47

Nano-technology 9
Nanocomposites 139
Nanoparticles 25, 32, 246, 275, 452
Nanostructures 58
Natural convection 299
Neel relaxation 13
Neel rotation 177
Non-linear 165
Non-linear response 181
Normal-field instability 346
Nucleic acids biosynthesis 459
Numerical simulation 238, 379

Oleic acid 328
Oleic acid coating 81
Oligoperoxide 17
Ordered structure 93
Orientational ordering 226
Oxyhemoglobin 452

Pair potential 171
Particle size distribution 97
Particle tracking velocimetry 392
Pastes 325
Peroxidase 473
Phagocytosis 463
Phase transitions 171
Photodynamic therapy 476
Photothermal 295
Plateau rule 215
Polarised neutrons 58, 149
Polishing 9
Polyaspartic acid 466
Polycaprolactone 5
Polydispersed ferrofluids 234
Polymer gels 126
Porous media 275, 278
Power loss 78
Precipitation 32
Primary cluster 392
Prisms 28
Prostate specific antigen 480
Pump 419

Radiolabeled nanoparticles 431
Raman spectroscopy 139, 452
Rayleigh–Marangoni–Benard 268
Reactive particle shell 17
Reciprocating seal 399
Reciprocating shaft 407
Relaxation 165
Relaxation effects 74
Relaxation of magnetization 242
Relaxation time 181
Reverse microemulsion 32
Rheological properties 87
Rheology 17, 21
Rietveld refinement 184
Rolls 264
Rotating field 335
Rotating Hele–Shaw flows 339

Scattering patterns 303
Seal 43
Seal gap 407
Seal structure 411
Sealing 419

Sealing liquid 411
Sedimentation 281
Self-assembly 9
Separation of bubbles 382
Shear flow 87
Shock wave 335
Silica coated particles 21
Silica matrix 139
Slurries 325
Small angle neutron scattering 39, 303
Small-angle scattering 58, 149
Small-angle X-ray scattering 54
Social insects 442
Sonochemical method 328
Soret coefficient 285
Soret constant 292
Soret effect 122, 289
Sound velocity 66
Specifically binding MNP 480
Spinel ferrites 118
Spontaneous magnetization 226
Squares 264
Stability 108
Stem cell 423
Strongly polar carriers 50
Structural formation 87
Structuralization 292
Structure factor 149
Styrene–divinylbenzene copolymers 25
Superparamagnetic iron oxide 423
Superparamagnetic particles 222
Superparamagnetism 152
Surface 385
Surface charge density 171
Surface effects 118
Surface initiated polymerization 5
Surface tension 192
Suspensions 17
Synthesis 32

Taylor–Couette flow 342
Templates 25
Termites 442
Thermal convection 122
Thermal stability 93
Thermodiffusion 97, 246, 275, 285, 289, 292, 295
Thermomagnetic convection 281
Thermomagnetic force 250
Thermosensitive 5
Transformer 415
Two-phase flow 403
Two-phase mixture model 281

UCST 5
UHV 43
Ultrasonic wave 66
Ultrasound 342
UVP 342

Vacuum 43
Virtual channel 389
Viscous fingering 356
Void fraction 403
Voltage measurement 403
Vortex viscosity 307

Wall-adjacent effect 367
Wave hierarchy 111
Wetting 385

X-ray microtomography 428
X-ray photon correlation spectroscopy (XPCS) 47, 54

Young–Laplace equation 379

Z-scan 285
Zero-field birefringence 168
Zinc phthalocyanine 476